

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-15 (cancelled).

Claim 16 (currently amended): A resin for a binder suitable for mineral fibers such as glass or stone wool, said resin comprising the reaction product of a polymer free mixture of an amine with a first anhydride and a second aromatic anhydride, characterized in that the first anhydride and the second aromatic anhydride are different anhydrides.

Claim 17 (currently amended): The resin for a binder suitable for mineral fibers such as glass or stone wool according to claim 16, wherein the first anhydride is a cyclic anhydride ~~and the second anhydride is a cyclic anhydride.~~

Claim 18 (currently amended): The resin for a binder suitable for mineral fibers such as glass or stone wool according to claim 17, wherein the first anhydride is an aliphatic anhydride ~~and the second anhydride is an aromatic anhydride.~~

Claim 19 (previously presented): The resin according to claim 18, wherein the aliphatic anhydride comprises one or more anhydrides selected from the group consisting of tetrahydrophthalic anhydride, hexahydrophthalic anhydride, methyltetrahydrophthalic anhydride, succinic anhydride, nadic anhydride, maleic anhydride, and glutaric anhydride.

Claim 20 (currently amended): The resin according to claim 16 48, wherein the aromatic anhydride comprises one or more anhydrides selected from the group consisting of phthalic anhydride, ~~and~~ trimellitic anhydride, ~~and/or~~ pyromellitic dianhydride and methylphthalic anhydride.

Claim 21 (previously presented): The resin according to claim 18, wherein the concentration of aliphatic anhydride is greater than the concentration of aromatic anhydride.

Claim 22 (previously presented): The resin according to claim 16, wherein the amine is a N-substituted beta hydroxy alkylamine selected from the group consisting of ethanolamine, 1-ethylethanolamine, 1-methylethanolamine, n-butyl-ethanolamine, 1-ethylisopropanolamine, 1-methylisopropanolamine, 3-amino-1,2-propanediol, 2-amino-1,3-propanediol, tris(hydroxymethyl)aminomethane, and diethanolamine.

Claim 23 (currently amended): A resin comprising a polymer free mixture for a binder, said resin comprising the reaction product of a cyclic anhydride and an amine, at a pH of from about 2.5 to about 4.2, said pH being predetermined to positively

influence the curing speed of the resin, wherein said cyclic anhydride comprises a first anhydride and a second aromatic anhydride that is different from said first anhydride.

Claim 24 (currently amended): The resin according to claim 23, wherein the ~~cyclic anhydride comprises a first anhydride which is an aliphatic anhydride and a second anhydride which is an aromatic anhydride.~~

Claim 25 (previously presented): The resin according to claim 24, wherein the aliphatic anhydride comprises one or more anhydrides selected from the group consisting of tetrahydrophthalic anhydride, hexahydrophthalic anhydride, methyltetrahydrophthalic anhydride, succinic anhydride, nadic anhydride, maleic anhydride, and glutaric anhydride.

Claim 26 (currently amended): The resin according to claim 23, 24 wherein the aromatic anhydride comprises one or more anhydrides selected from the group consisting of phthalic anhydride, ~~and~~ trimellitic anhydride, ~~and/or~~ pyromellitic dianhydride and methylphthalic anhydride.

Claim 27 (previously presented): The resin according to claim 24, wherein the concentration of aliphatic anhydride is greater than the concentration of aromatic anhydride.

Claim 28 (previously presented): The resin according to claim 23, wherein the amine is a N-substituted beta hydroxy alkylamine selected from the group consisting of ethanolamine, 1-ethylethanolamine, 1- methylethanolamine, n-butyl-ethanolamine, 1-1-ethylisopropanolamine, 1-methylisopropanolamine, 3-amino-1,2-propanediol, 2-amino-1,3-propanediol, tris(hydroxymethyl)aminomethane, and diethanolamine.

Claim 29 (previously presented): The binder for mineral fibers such as glass or stone wool comprising the resin according to claim 16.

Claim 30 (previously presented): The binder according to claim 29, further comprising an accelerator and one or more resin additives selected from the group consisting of aminopropyl siloxane, thermal stabilizers, UV stabilizers, surface active compounds, fillers, silicates, magnesium sulfate, hydrophobising agents, oils, minerals, and silicone oils.

Claim 31 (currently amended): The binder according to claim 30, wherein the accelerator is selected from the group consisting of ~~comprising~~ sodium phosphinate, phosphinic acid, citric acid, adipic acid and g-hydroxyalkylamid.

Claim 32 (currently amended): The binder according to claim 29, further comprising one or more additives selected from the group ~~comprising~~ consisting of monosaccharides, disaccharides, and polysaccharides.

Claim 33 (currently amended): The binder according to claim 32, wherein the monosaccharides, disaccharides, and polysaccharides are one or more selected from the group consisting of sucrose, glucose syrup, modified starch, starch urea dicyandiamid, polyglycols, acrylics, furfural, carboxymethyl cellulose and cellulose, ~~or~~ and polyvinyl alcohol.

Claim 34 (previously presented): The binder according to claim 29, wherein the binder has been cured.

Claim 35 (previously presented): The binder for mineral fibers such as glass or stone wool comprising the resin according to claim 23.

Claim 36 (previously presented): The binder according to claim 35, further comprising an accelerator and one or more resin additives selected from the group consisting of aminopropyl siloxane, thermal stabilizers, UV stabilizers, surface active compounds, fillers, silicates, magnesium sulfate, hydrophobising agents, oils, minerals, and silicone oils.

Claim 37 (previously presented): The binder according to claim 36, wherein the accelerator is selected from the group comprising sodium phosphinate, phosphinic acid, citric acid, adipic acid and g-hydroxyalkylamid.

Claim 38 (previously presented): The binder according to claim 35, further comprising one or more additives selected from the group comprising monosaccharides, disaccharides, and polysaccharides.

Claim 39 (currently amended): The binder according to claim 38, wherein the monosaccharides, disaccharides, and polysaccharides are one or more selected from the group consisting of sucrose, glucose syrup, modified starch, starch urea dicyandiamid, polyglycols, acrylics, furfural, carboxymethyl cellulose and cellulose, ~~or~~ and polyvinyl alcohol.

Claim 40 (previously presented): The binder according to claim 35, wherein the binder has been cured.

Claim 41 (previously presented): The mineral fiber product bound by a cured binder according to claim 29.

Claim 42 (previously presented): The mineral fiber product bound by a cured binder according to claim 35.

Claim 43 (previously presented): A method for providing a polymer free resin for a binder suitable for binding mineral fiber products, said process comprising the steps of mixing together under reaction conditions an amine with a first aliphatic cyclic anhydride and a second aromatic cyclic anhydride.

Claim 44 (new): A resin for a binder suitable for mineral fibers, such as glass or stone wool said resin comprising the reaction product of a polymer free mixture of an amine with a first anhydride and a second aromatic anhydride, characterized in that the first anhydride and the second aromatic anhydride are different anhydrides, and wherein flowtime of said resin is reduced by at least a factor of two as contrasted with a binder composition having only one anhydride.

Claim 45 (new): A resin comprising a polymer free mixture for a binder, said resin comprising the reaction product of a cyclic anhydride and an amine, at a pH of from about 2.5 to about 4.2, said pH being predetermined to positively influence the curing speed of the resin, wherein said cyclic anhydride comprises a first anhydride and a second aromatic anhydride, and wherein flowtime of said resin is reduced by at least a factor of two as contrasted with a binder composition having only one anhydride.